NATIONAL GRID USA companies

NEW ENGLAND

VEGETATION MANAGEMENT INCENTIVE PROGRAM

APRIL 9, 2002

DESCRIPTION AND GUIDELINES VENDOR TREE CREWS

GOAL

To improve reliability, attain customer satisfaction, and accomplish more miles of trimming per year in a safe, efficient, and cost effective manner. Also, to assist the vendors in developing a more stable workforce.

MEASURABLE DRIVERS

Miles Trimmed- A predetermined mileage requirement is set by budget divided by avg. cost per mile. The bonus award is established, based on preset thresholds achieved over the requirement, up to a maximum of a 20% enhancement.
Customer Complaints- This is a complaint that requires remediation equal to or greater than $ 250.00 in costs and the crew was determined to be negligent by the National Grid companies Arborist. If the crew is required, by the National Grid companies Arborist, to re-trim a span or more due to poor performance by the crew then, this constitutes a complaint.
Crew Caused Outages- Any outage that was directly derived by an action of the vendor companies employee and was not a planned outage.
Avoidable Lost Time Accidents- This is an accident that could have been avoided by following the appropriate vendor company and/or OSHA safety practices and procedures.

QUARTERLY VENDOR CREW BASE AWARDS MEASURES

Quarterly each vendor crew employee directly involved in the National Grid companies District level distribution line maintenance incentive program will have the opportunity to achieve the maximum quarterly award of $400.00. This award is prorated based on the % over miles trimmed requirement attained and reduced based on the individual criteria.

QUARTERLY AWARD DISTRICT CRITERIA

TRIMMED MILES ACCOMPLISHED- If District miles trimmed productivity exceeds the projected quarterly weighted annual requirement by 20% or more they attain the full $ 400.00 quarterly award. Between the projected requirement and the 20% enhanced productivity they can attain $ 50.00 at 7.5% and an additional $ 50.00 for each 2.5% improvement up to 15.0% and an additional $ 75.00 to 17.5% and 125.00 at 20.0% for the full $ 400.00.

INDIVIDUAL CRITERIA (All deductions are tallied, totaled and deducted from the award.)

EMPLOYMENT STATUS- The employee must have been employed by the vendor and working in the evaluated National Grid Company District for the full evaluated quarter.
CUSTOMER COMPLAINTS- The first complaint will reduce the award by 30%, the second complaint by 60%, and the third complaint by 100%.
CREW CAUSED OUTAGE- 1 outage in a quarter will reduce the award by 50%. Greater than one, will disqualify the employee from the award.

AVOIDABLE LOST TIME ACCIDENT- No lost time accidents in a quarter are acceptable. 1 Lost time accident will disqualify the employee from the award.

CREW ANNUAL RECOGNITION AWARD

Annually each vendor crew employee directly involved in the National Grid companies District level distribution line maintenance incentive program will have the opportunity to achieve the maximum annual award. This award is prorated based on the following criteria.

ANNUAL AWARD DISTRICT CRITERIA

TRIMMED MILES ACCOMPLISHED- If National Grid USA trimmed Miles productivity exceeds the projected annual requirement by 20% or more, the vendor employee attains the full $1,000.00 annual award. Between the projected requirement and the 20% enhanced productivity they can attain $ 100.00 at 7.5% and an additional pro rated amount for each 2.5% improvement up to the full $ 1,000.00.

INDIVIDUAL CRITERIA (All deductions are tallied, totaled and deducted from the award.)

EMPLOYMENT STATUS - The employee must have been employed by the vendor and working in the evaluated National Grid USA Company service area for a minimum of a full quarter and their award will be prorated based on quarters worked.
CUSTOMER COMPLAINTS- Each individual complaint will reduce the award by 25%. Four or more complaints will disqualify the employee from the annual award.
CREW CAUSED OUTAGE- 1 outage in a year will reduce the award by 50%. Greater than one event will disqualify the employee from the annual award.
AVOIDABLE LOST TIME ACCIDENT- No lost time accidents in a quarter are acceptable. One event will disqualify the employee from the annual award.

All awards paid out will include, all related statutory overhead costs.

NATIONAL GRID USA companies

NEW ENGLAND

ARBORIST REQUIREMENTS

APRIL 9, 2002

PURPOSE

To define the role of the Company Arborist within the Vegetation Management Program. This description is to include the relationship between the Arborist Requirement, the Vendor Requirements, and Vegetation Management Requirements. The interrelationship is designed to insure high cost effective productivity without jeopardizing work quality and reliability. These requirements identify seven major areas.

PLAN, BUDGET, & ADMINISTRATION

Plan- The Arborist is responsible for developing long and short term plans for their respective management area. This is done by analyzing the vegetation management program data and conducting field survey validations to prioritize preventative maintenance activities and hazard tree removals on a feeder basis. They are also responsible for the workload planning of retail company R.O.W. maintenance activities, within the same management area.

Budget- In concert with the long and short term plans the Arborist is responsible for developing plan related budgets to show what financial resources will be required to carry out the identified plans. Annually, the Arborist will prepare a workload budget and plan of work required to meet the objectives of the long range plan. Once budgets are established and if they differ from the annual budget and workload plan, then it is the Arborists responsibility to reconcile the annual budget and plan to conform with the new budgeted dollars.

Administration- The Arborist is ultimately responsible for overall program administration, which includes; the implementation of the long, short, and annual term plans within the approved budgets, management of all collected data, and attainment of annual goals and objectives. They are also responsible for working with the vendor in the development and approval of the Annual Vegetation Implementation Plan which is how the annual plan and goals are achieved.

AUDIT AND EVALUATION OF INTERNAL AND EXTERNAL PROGRAM PERFORMANCE

Internal- The Arborist is responsible for electronic data and records management and maintenance, fiscal accountability, environmental laws and regulatory adherence, following Company policy, procedures, and regulations and complying with Company fiscal and regulatory internal audit standards.

External- Through the implementation of quality control practices, the Arborist is responsible for assuring that the vendor meets or exceeds Company standards and expectations. This is done by auditing vendor; performance, work practices, safety procedures and guidelines, equipment condition, and impact on reliability. The Arborist will monitor vendor; cost effectiveness, trimmed miles accomplished, data management recording accuracy, customer satisfaction, appearance, and communication skills.

EMERGENCY RESTORATION

The Arborist is responsible for knowing, understanding, and implementing the Company's storm and emergency restoration policies and procedures. They should be prepared to implement these policies and procedures within their respective management area when necessary. All vendor personnel working within the Arborists management area, will be fully informed and aware of what is expected of them during a storm or emergency restoration situation, by the Arborist.

INTERDEPARTMENTAL COORDINATION

Periodically the situation arises where the services of one or more departments, within the Company, may be needed to implement and /or complete a project. It is the Arborists responsibility to know all internal parties within their management areas that may be needed and to coordinate the engagement of their services to implement and/or complete the task, that the Arborists program needs implemented and/or completed.

EXTERNAL PUBLIC RELATIONS AND EDUCATION

It is important that the Arborist interacts with the vendor and the customer to assure that the customer understands the necessity, care, and professionalism of the services being provided to them, in order to obtain difficult or limited permission to provide the vegetation management program services. In the event that the vendor cannot get permission or gets limited permission from the property owner, the Arborist will take the documented information from the vendor and attempt to obtain the permission themselves. Regardless of the results, the Arborist should keep the documented event on file for future evidence. Whenever possible the Arborist should attempt to get a photo of the tree(s) in question.

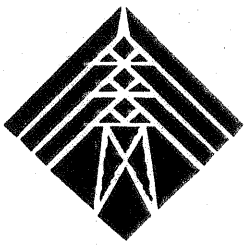
This position will periodically have to make presentations about the importance and quality of service of the program to; neighborhood groups, civic groups, elected officials, government regulators, vendors, and other interested parties. These presentations can encompass; scientific technical, programmatic, legal, and procedural information.

PROFESSIONAL DEVELOPMENT

The Arborist is responsible for it's own continued professional development through; membership in affiliated professional organizations, career development, professional development, data management, electronic processing, office automation, and other associated seminars/courses.

TECHNICAL ADVISOR

Periodically, the Arborist is required to provide professional technical and scientific advise to other Company departments. On occasion the Arborist, may be required by the Company's legal department, to provide professional services as an expert witness.



National Grid

NEW ENGLAND

VEGETATION MANAGEMENT DISTRIBUTION LINE MAINTENANCE LUMP SUM BID PROGRAM MANUAL

MAY 27, 2003

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CHAPTERS

GLOSSARY

Adventitious buds- Dormant buds located in a leader.

Annual growth- A yearly incremental stage of vegetation growing that can be visually determined by the annual nodes.

Arborist/Forester- Here after referred to as "Arborist". A National Grid USA employee whose role within their respective administrative district is to plan, budget, execute, and audit vegetation management projects; resolve customer issues; work closely with district vendor leadership to achieve performance goals & assist the administrative district with municipality relations/issues. Additionally, to participate in managing storm restoration; implement program policies/programs & provide regular status updates.

Brush- Vegetation less than four inches DBH that may reach the overhead facilities at maturity.

Clearance- The distance between vegetation and the overhead facilities.

Company- This represents the National Grid USA Retail Distribution companies.

Construction type- The configuration and design of the lineal overhead facilities.

DBH- The diameter of vegetation measured at a point four and one half feet above ground level.

Dominant- Exerting ecological or genetic superiority.

Dormant- Not actively growing but protected from the environment.

Flat cutting- The practice of cutting vegetation at ground level under or adjacent to overhead facilities, where the vegetation has the potential to interface with the overhead facilities.

Hazard- Vegetation which appears to: be dead or dying, be structurally weak, have loss of bark, have loss of foliage, and have stress breaks.

Lateral branch- A branch extending from a parent branch or stem.

Line clearance- The practice of removing vegetation from around overhead facilities.

Main leader- A dominant upright stem, usually the main trunk.

Multiple leaders - Many stems of vegetation originating from the same root system.
Node- A point on a stem at which a leaf or leaves are attached.

Overhead facilities- All electrical conductors and equipment that are attached to a utility pole and are used for the conveyance of electricity.

Permission- The act of receiving approval from the appropriate property owner, where the vegetation is located, in order to perform necessary preventative maintenance on the vegetation.

Plant- Relative to distribution vegetation management purposes, the definition is a tree, vine, or shrub.

Preventative maintenance-The pruning, trimming, removal or chemical treatment of vegetation, growing or existing in proximity to overhead facilities, for the purpose of preventing such growth from interfering with the overhead facilities.

Pruning- The removal, in a scientific manner, of dead, dying, diseased, interfering, objectionable, and/or weak vegetation branches.

Scaffold branch-A large limb that is, or will be part of the permanent branch structure of a tree.

Shrub- A low usually multi-stemmed woody plant.

Sucker growth- New growth originating from adventitious buds. Usually induced by removing a branch.

Tree- A woody perennial plant having a single usually elongate main stem.

Trim- See "Pruning"

Trim cycle- A predetermined period of time between preventative maintenance activities.

Trim zone- The area in and around overhead facilities where vegetation is removed.

Vegetation- Plant life such as trees, shrubs, vines, and brush that has a potential to interface with overhead facilities.

Vendor- A Vegetation Management service provider who has a Purchase Order to provide such services to the National Grid USA companies, Districts, and Arborists.

Vine- A plant whose stem requires support and which climbs by tendrils or twining.

NATIONAL GRID USA companies

NEW ENGLAND

DISTRIBUTION LINE VEGETATION MANAGEMENT REQUIREMENTS

May 27, 2003

PURPOSE

To define a set of Distribution Line Vegetation Management Requirements that is implemented by the Company on a uniform basis. These requirements are to lay out the specifications for routine preventative maintenance and removal of; dead, unsound, and structurally weak branches and leaders. The Company's Distribution Line Vegetation Management Requirements are designed to address reliability and safety through the understanding of the dynamic interaction between vegetation and overhead facilities.

TRIM CYCLE

The recommended trim cycle is a five-year cycle with a three-year interim trim. The trim cycle is implemented on an annual basis, by identifying the feeders that are due to be trimmed and prioritizing them on a reliability performance basis. The interim trim is implemented by identifying which feeders are halfway through the cycle. They are surveyed for growth and hazard situations and then prioritized for interim trimming. Customer Service lines are only trimmed on the trim cycle basis unless the Arborists determines that a special condition exists requiring an interim trim.

TREE TRIMMING ZONE SPECIFICATION REQUIREMENTS

Table A below illustrates the clearance distance required by the Company for all distribution line clearance maintenance activities based on Overhead facilities construction types. As with all programs there are exceptions to the rules and additional special conditions requirements. These are all clearly spelled out in the following sub-sections. These specifications are designed to prevent vegetation capable of interfering with the overhead facilities, from encroaching upon them, within a four-year period.

TABLE A

CONSTRUCTION TYPE	TRIM ZONE
ALL CROSS ARM CONSTRUCTION	ABOVE 15' SIDE 6' UNDER 6'
ALL SPACER CABLE, POLE TOP PIN, AND ARMLESS CONSTRUCTION	ABOVE 6' SIDE 6' UNDER 6'
TRIPLEX AND RACKED SECONDARY	FOUR FOOT RADIAL CIRCLE
HOUSE SERVICE	12" RADIAL CIRCLE

HAZARD REMOVALS WITHIN TRIM ZONE

Remove all hazardous branches from above or adjacent to the overhead facilities to protect the facilities until the next trim cycle.

SELECTIVE FLAT-CUTTING WITHIN THE TRIM ZONE

Targeted for flat cutting will be tree species that are under the electric conductor(s) and are over 8' in height.

TRIM ZONE EXCEPTIONS

Clearances restricting trim zone requirements

Permissions restrictions-In the event that permission from a property owner to trim or remove in accordance with these specifications cannot be obtained, the following steps will be taken:

LIGHT TRIM- Computer or form entry with inclusion of town, street address and pole number.

REFUSAL TO TRIM- Computer or form entry with inclusion of property owner name, address, telephone number, pole number, description of site, and if possible, signature of property owner.

REFUSAL FOR HAZARD REMOVAL- If permission is denied for the removal of a hazardous limb/tree a computer or form entry with inclusion of the property owners name, address, telephone number, pole number, description of defect or hazard and if possible, property owners' signature. These serious hazards warrant a photo of the tree and follow up by the Arborist.

*Above information will be provided back to the Arborist on a regular basis, as identified.

Structural restrictions- In the event that the main leader and/or scaffolding branches fall within the trim zone are determined not to interfere with the overhead facilities; structurally sound and; free of sucker growth within the trim zone, then the main leader and/or branch may remain in the trim zone.

TYPES, METHODS, AND TECHNIQUES

Acceptable Tree Trimming Types

There are three basic types of trimming that will be discussed in this section. They include; Crown Reduction (Top trimming), Side trimming, and Overhang trimming. There are two additional trimming terms used when discussing trimming types and they are under trimming and V or Through trimming. They will not be listed as separate types because they usually involve one or more of the types already listed. The type of trimming that is selected to be used should be based upon the tree to overhead facility relationship, factoring in the type of tree being trimmed and its growth habits. The ultimate goal is to achieve the necessary clearance to provide a continuous supply of reliable electrical service free of interference from trees while maintaining, as close as possible, the natural characteristics of the tree being trimmed.

Crown Reduction - This type of trimming is also called "Top trimming". It is best when used on slow growing trees. The trimming methods employed to accomplish this affect include drop crotching and/or directional trimming. The trimming type reduces the top of the trees crown when the tree is directly located underneath the overhead facilities and is intended to give the tree a natural look. The trimming should be done with as few cuts as possible and the branches should cut back to a leader, which will minimize the potential for sucker growth.

Side Trimming - Trees growing adjacent to, into, and towards overhead facilities should be side trimmed by removing the entire branch back to the main leader or at least free of the trim zone. Trees with branches that produce sucker growth when cut should definitely be removed. Care should be taken to reduce the effect of unsightly notches by shaping adjacent branches.

Overhang Trimming - This is where the overhead facilities pass under a portion of the crown and the lower branches are removed to provide trim zone overhead clearance. If it is not possible to totally remove overhangs, then every attempt should be made to reduce the weight of the overhang by trimming the branches. All dead, damaged, or weakened overhang branches must be removed.

Acceptable Tree Trimming Methods

There are two basic methods employed in utility line clearance trimming,"Drop Crotching" and "Directional Trimming". These are the two methods that will be accepted by the arborists. On occasion a vendor may be requested to apply an alternative method to fulfill a special set of needs or criteria. Although not considered a trimming method, trees that are approximately 15 feet in height should be trimmed at the nodes. Alex Shigo calls this "First Order Pruning". The branches that should be retained are those that will produce future growth directionally away from the overhead facilities.

Drop Crotching - This method of trimming calls for removing some of the larger branches at variable distances below the top of the crown. It is intended to retain as much of the natural characteristics of the tree as possible while thinning the crown of the tree. This method of trimming should eliminate future sucker growth, when proper nodal pruning cuts are made, and reduces the amount of trimming work required in subsequent trimming operations.

Directional Trimming - The intent of this method is to direct future growth away from the overhead facilities. It is accomplished by cutting the growth to a lateral branch, which will redirect its future growth away from the overhead facilities.

In Dr. Alex L. Shigo's publication, "Pruning Trees Near Electric Utility Lines" he indicates that 90% of the time 3 branches can be removed to provide 90% of the clearance, which is his 90-3-90 concept. When utilizing these two methods to accomplish a trimming type, this concept should be considered as an employable technique. The use of the two methods will provide the maximum amount of clearance necessary to assure proper clearance from the overhead facilities while minimizing the amount of tree deformation occurring.

Acceptable Pruning Techniques

Pruning techniques and practices are fully explained and diagramed in ANSI A-300, and another excellent reference is Dr. Alex L. Shigo's publication "Pruning Trees Near Electric Utility Lines". Given the fact that these publications provide as excellent guides for this subject area, we feel that there is no need for further explanation.

HAZARD MITIGATION

All vegetation hazards which take one hour or more to remove should not be looked at as a preventative maintenance function but as a hazard mitigation function and should be managed as such. The hazard removal should be identified by the nearest pole location and should be scheduled for removal by a hazard mitigation crew, unless the hazard poses an immediate outage or safety situation. In the event of an immediate outage or safety situation the vendor should immediately notify the Arborist for a determination of removal by the vendor.

NATIONAL GRID USA companies

NEW ENGLAND

VEGETATION MANAGEMENT *VENDOR REQUIREMENTS FOR LUMP SUM BID CREWS*

May 27, 2003

PURPOSE

To define the role and expectations of the Company's vendors in relation to vegetation management activities performed by the Vendor's Lump Sum Bid crews for the Company. The role and expectations will include such items as; personnel, equipment, customer relations, government relations, Utility relations, storm emergency implementation procedures, time management, wood waste management, and other related items.

VENDOR REQUIREMENTS

PERSONNEL

The vendor shall determine and provide the appropriate level of supervision required to maintain high quality workmanship and optimum productivity in a cost effective manner and in accordance with the supervisory requirements defined in this Chapter.

The vendor is to provide the appropriately trained and certified labor force required to maintain high quality workmanship and optimum productivity while implementing the vegetation management requirements and vendor requirements.

All services are billable in accordance with the awarded vendor Lump Sum bid prospectus. Any services required by the Arborist, which are not on the awarded vendor Lump Sum bid prospectus will be paid hourly and in line with the vendors T & M submitted rate sheets or will require prior approval from the System Arborist and Supply Chain.

VEGETATION MANAGEMENT SERVICES

Preventative Maintenance- Those services as described in the "Distribution Line Vegetation Management Requirements" section. All Preventative maintenance will be conducted on reliability prioritized and Lump Sum Bid awarded feeder basis.

Hazard Tree Mitigation- Those services as described in the "Distribution Line Vegetation Management Requirements" section entitled Hazard Mitigation. The vendor personnel should continuously look for hazardous conditions, assess level of severity, and identify the hazard location by street and pole number. They should immediately report such hazard conditions to their immediate supervisor for reporting to the Arborist. In the event that they cannot reach their immediate supervisor, they should directly notify the Arborist.

Re-trims - All work which is determined by the Arborist to be inside the "Distribution Line Vegetation Management Requirements" which does not have documentation as to why the "Distribution Line Vegetation Management Requirements" could not be met will be required to be re-trimmed at the vendors expense. Any work that gains a change in permission status after trimming has occurred will be re-trimmed at the vendors expense expense.

CUSTOMER RELATIONS

Workers shall be properly attired and act in a professional manner. Contact with customers shall be done in a businesslike manner and all requests shall be clear and precise to avoid customer misunderstanding or apprehension. Should there be a serious misunderstanding with a customer, which the vendor cannot fully address or alleviate; the vendor shall notify the Arborist.

UTILITY RELATIONS

Communication- The vendor labor force will contact the Company daily and report; work location and daily location changes, observed overhead facility problems and outages particularly crew caused outages.

The vendor shall communicate with the Arborist on a weekly basis on such matters including but not limited to work progress. The Arborist will have a two week period, from the time of work progress notification, in which to review the work reported complete for compliance with the "Distribution Line Vegetation Management Requirements". At which time the Arborist will provide a list of Re-trims to be completed for work which the Arborists interprets as not being in compliance.

Invoicing- The vendor will invoice for work completed on a periodic basis, as determined by the vendor. All Lump Sum Bid work is to be completed by the 31st day of January. All corrective re-trims will be completed by the 1st of March. In any event no invoice will be processed and paid until all invoice associated work has been completed and/or remediated. Any work not successfully completed and/or remediated by March 1st, will be redirected to another vendor on a T & M basis to be completed by that vendor utilizing the allocated unexpended funds of the Lump Sum contract.

Remediation- Any technical clarifications or issues that need to be resolved between the Lump Sum vendor and the Arborist, will be remediated by the New England System Arborist. Any Contractual clarifications or issues that need to be resolved between the Lump Sum vendor and the Arborist, will be remediated by the appropriate Supply Chain Purchasing Agent. All local remediation should first be attempted to be resolved between the Lump Sum Vendor and the Arborist.

Data Management- The vendor is responsible for collecting, on company provided electronic data collectors, the required data information requested. In the event that an electronic data collector is not available, then data collection forms will be provided by the company requesting the relevant data information required. The vendor's personnel are responsible for the accuracy of the data that they are reporting and the safe handling of the electronic data collector. If the vendor's personnel breaks the data collector and it is found by the Company to be due to negligence on the vendor's personnel behalf, then the vendor will be charged for the replacement of the electronic data collector.

ALL DATA INFORMATION COLLECTED ON BEHALF OF A NATIONAL GRID USA COMPANY IS CONFIDENTIAL AND THE SOLE OWNERSHIP OF NATIONAL GRID USA.

STATE RELATIONS

The vendor is responsible for notifying the proper state official for all proposed vegetation management activities on state highways. If a permit is required, the company shall obtain the permit. Under specific situations, the Arborist will obtain the necessary permits. Copies of required permits will be kept on site with the crew.

PERMISSIONS

The Vendor will be responsible for determining and implementing the most cost effective approach, for the company, in obtaining permission.

Private property- The Vendor must obtain permission from all private property owners prior to working on private property, except where noted by the Arborist. The vendor will provide the customer, if not at home, with a Company Vegetation Management Program door knocker brochure and a vendor permission card. If the vendor is not provided with Company approved door knockers and permission forms, then the vendor will utilize their own company produced forms.The vendor shall make a minimum of three documented and reasonable attempts at gaining permission from private property owners. All subsequent skips should be reported to the Arborist for follow up. The vendors crews will not trim or remove vegetation if contact with private property owners cannot be made or if the private property owner refuses to grant permission.

Municipal property - The vendor shall obtain permission to do tree work on municipal trees from the proper authority before doing the work. The vendor shall notify the proper municipal official (e.g. Tree Warden, etc.) and let them know where the vendor crews will be working. If a municipal official refuses clearances as specified in the "Distribution Vegetation Management Requirements" the vendor should document the restriction and inform the Arborist.

Permissions restrictions - In the event that permission from a property owner to

trim and remove trees in accordance with these specifications can not be obtained, the following steps will be taken:

Light trim- Computer or paper form entry with inclusion of town, street address and/ or pole number.
Refusal to trim- Computer or paper form entry with inclusion of property owner name, address, telephone number, pole number, description of condition and possible signature.
Refusal for hazard removal- If permission is denied for removal of a hazardous limb or tree, a computer or form entry with inclusion of the property owner's name, address, telephone number, pole number, description of condition and possible signature. These serious hazard conditions warrant immediate follow up, including a photo of the tree by the vendor supervisor or the Arborist.

All information above will be reported back to the Arborist on a regular basis

EQUIPMENT

The vendor will provide equipment necessary for the performance of the requested services in accordance with the "Distribution Line Vegetation Management Requirements" and the Purchase Order. This equipment shall be properly maintained, in good operating and presentable condition. The equipment must meet all applicable DOT, ANSI and OSHA Regulations/Standards.

Any equipment required by the Arborist, which are not part of the vendor submitted Lump Sum Bid, will require prior approval from the System Arborist and Supply Chain and if approved, will be billable at the Vendors submitted T & M hourly rate.

The vendor shall be responsible for supplying, at a minimum, a properly operating pager to all supervisory personnel identified as such relative to the awarded Lump Sum Bid. This is imperative for both normal business and emergency response.

WORK SITE CLEAN-UP

The vendor is responsible for all work sites to be properly cleaned of vegetation debris, including the legal and environmentally acceptable disposal of leaves, branches, wood, wood chips or slash in accordance with federal, state, and municipal regulations and guidelines.

In the Districts where wood chip disposal/work platform areas are provided, the woodchips must be free and clear of all trash and other undesirable debris that could reduce the resale of the woodchips. Attention to chipper maintenance for the consistent production of high quality woodchips is imperative.

HOURS OF OPERATION

Normal work schedule - – Sunday thru Saturday 7:00 AM to not later than 6:00 PM are the acceptable range.

Travel and Chip Disposal Time- The hours of operation are to include travel to and from the work site, fuel time, and wood chip disposal.

STORM EMERGENCY RESPONSE

Lump Sum Bid Vendor Storm Response - The Lump Sum crews will be allocated to all Divisions and their Districts on a retail company basis and based on need, at the discretion of the New England System Arborist. . Vendors will not be allowed to reallocate any Lump Sum Crews to another assignment outside the Company until the Company has been offered the first right of refusal.

Storm Equipped Aerial Lift Trucks

All equipment required for storm response purposes shall be in a safe and reliable operating condition.

The following is required equipment during storm conditions:

Truck mounted aerial lift and lift to be a minimum of forty five foot platform height, and all necessary tools, equipment and clothing for storm restoration work including night lighting. Chippers are not required storm equipment unless requested by the Arborist.

Request 3-28

Request:

All: Please provide a summary by year, for each of the past 5 years, of your expenditures for maintenance tree trimming (i.e., trimming not associated with additions, extensions, overlashing, construction or reconstruction). Please include in this summary the number of miles trimmed in each year.

Response:

Year	Trimming Expenses	Miles Trimmed
2001	$652,301	145
2002	$491,912	109
2003	$566,347	125
2004	$1,048,272	185
2005	$643,690	131

Prepared by or under the supervision of: Jeffrey Carney

Request 3-29

Request:

All: When performing trimming of joint lines, what standards or specifications are used for line clearances? (In other words, how much is cut?)

Response:

The company who initiates the trimming applies their standards and specifications. Historically, trimming initiated by Verizon, performed by their trimming contractor using their standards/specifications, does not meet the clearance requirements for the electric company. This can result in additional trimming expenses by one or both utilities. Trimming initiated by the electric company using its standards and specifications meets or exceeds Verizon's requirements.

Prepared by or under the supervision of: Jeffrey Carney

Request 3-31

Request:

All: How many miles of overhead line does your company own and maintain in your New Hampshire service area(s)?

Response:

The total number of overhead primary miles in New Hampshire is 882.

Prepared by or under the supervision of: David C. Way

Request 3-32

Request:

Verizon only: Is the cost of trimming associated with the FTTP program considered by Verizon to be "maintenance" or "construction" trimming?

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-33

Request:

Verizon only: How does Verizon determine whether to participate financially in maintenance trimming on joint pole lines? Please list all criteria which must be met in order for Verizon to agree to divide the cost of maintenance trimming undertaken by an electric utility on jointly owned lines.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-34

Request:

Verizon only: Please describe your understanding of the need for tree trimming to maintain line clearances in order to protect and maintain the integrity of your own facilities, as well as the facilities of other parties attached to the poles.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-35

Request:

Verizon only: Please reference IOP #17 of the Inter-company Operating Procedures between Verizon and Unitil. Please explain how Verizon determines whether or not it will benefit from Joint Tree Trimming.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-36

Request:

Verizon only: Does Verizon ever perform maintenance trimming (i.e., trimming not associated with additions, extensions, over-lashing, construction or reconstruction) on joint owned lines? If yes, under what circumstances? Is this trimming coordinated with electric companies to maximize benefits and achieve efficiencies?

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-38

Request:

Verizon only: When Verizon is informed by another joint owner to: a) replace a pole in Verizon's maintenance area due to the discovery that the pole was damaged and temporarily made secure by that joint owner; b) replace anchors due to the discovery that the anchors are pulling out or are corroded, resulting in potential sag or low wires; or c) perform a "cut and kick" operation with the other joint owner, how does Verizon ensure that it undertakes the requested work in a timely manner (i.e., within 60 days)? Are there any such requests outstanding in excess of 180 days? One year? Two years?

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-39

Request:

All: To the extent that the information requested in this request has been supplied in a previous response, please supply a reference. The National Electrical Safety Code requires inspections, record keeping, and timely correction of defects found during inspections. (If you disagree with this interpretation, please supply your interpretation of the National Electrical safety Code and a detailed rebuttal of the position stated herein). For poles, clearances, broken guy wires, slack guy wires, or defective attachment hardware, please supply, by year, for the years 2000 through 2005 inclusive:

a) The frequency at which these inspections are performed
b) The percentage of the system inspected and how that percentage is calculated
c) The priority for replacement given including any time requirements
d) A copy of the inspection sheet (or screens) used by the inspector
e) A description of the method on how you track the deficiencies noted and completion progress
f) The backlogs at year end for each item.

Response:

Supporting documentation is not available for the years 2000 through 2003, however, we did do feeder inspections during those years. Deficiencies found were generally corrected in a timely fashion.

For the years 2004 and 2005;

a) Feeder inspections were conducted annually. Transmission/Sub-Transmission lines are inspected bi-annually by helicopter.
b) 100% of the feeders in New Hampshire are inspected
c) If a public safety issue or imminent component failure is found, a crew is called to correct the situation. All other findings are logged and corrected within a reasonable time frame.
d) See Attachment 3-39
e) Deficiencies are recorded and completion progress is documented on a spreadsheet maintained by the division overhead coordinator.
f) There was no back log for the years 2004 and 2005.

Prepared by or under the supervision of: David C. Way

Request 3-40

Request:

Verizon only: With regard to Verizon's response to Staff 1-12, please provide the definition of "ongoing and regular" as used in the first sentence of the response. Please describe every method employed by Verizon on an "ongoing and regular basis" to inspect poles other than when a pole is climbed.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-41

Request:

Verizon only: Please provide a list of all poles climbed by Verizon technicians in each of the last five years.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-42

Request:

Verizon only: If poles have been identified as unsafe and designated "condemned" by the method described in Verizon's response to Staff 1-12, how does Verizon ensure that the identified unsafe pole has been adequately addressed if, according to Verizon's response to Staff 1-14, Verizon is unable to identify work orders to replace condemned poles?

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-43

Request:

Verizon only: Please indicate whether Verizon has, in each of the last five years, and is currently, conducting inspections of all jointly owned poles in each of its maintenance areas in New Hampshire. If not, please indicated for which time periods and/or which maintenance areas it has not conducted or is no longer conducting such inspections.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-44

Request:

Verizon only:

a) Is Verizon conducting inspections in its maintenance areas in Unitil's service areas according to the terms of IOP #16 of the Intercompany Operating Procedures between Unitil and Verizon, dated November 1, 1996? If yes, please provide all documentary evidence of such inspections over the past five years.

b) Are all poles in Verizon's maintenance area of Unitil's service area inspected by Verizon at or before the age of 20 years? Thereafter, are all poles in Verizon's maintenance area in Unitil's service area inspected by Verizon at intervals not to exceed 10 years? How does Verizon ensure that all poles in its maintenance area are inspected in accordance with IOP # 16 and NESC 214A?

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-45

Request:

Verizon only: Please provide all documentary evidence of the frequency of Verizon's inspections of jointly owned poles in Verizon's maintenance areas.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-46

Request:

Verizon only: Please reference the response provided by Verizon to Staff 1-12: Please explain how, simply through its "normal course of business," and without a "set pole inspection schedule," Verizon is able to ensure that all of the jointly owned poles in its maintenance areas are inspected at regular intervals.

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-47

Request:

Verizon only: Please reference the response provided by Verizon to Staff 1-17: Please provide copies of all "notices posted by foremen in respective coverage offices" regarding "hazardous pole conditions" in your possession for those garages that support work in Unitil's service area (seacoast and capital service areas).

Response:

Verizon only.

Prepared by or under the supervision of:

Request 3-48

Request:

Verizon only: Reference your response to Staff 1-23: Is it Verizon's position that the absence from its union contract of provisions concerning the use of qualified third-party contractors to address safety concerns excuses the company from its obligations to address those safety concerns in a timely manner when its internal workforce is insufficient or unable to respond?

Response:

Verizon only.

Prepared by or under the supervision of:

Feeder Patrol Sheet

Patrolled By:_____
Date Completed:_____

Feeder # _____
Page _____ **of** _____

Town	Street	Pole #	House #	Item of Concern

Request 3-30

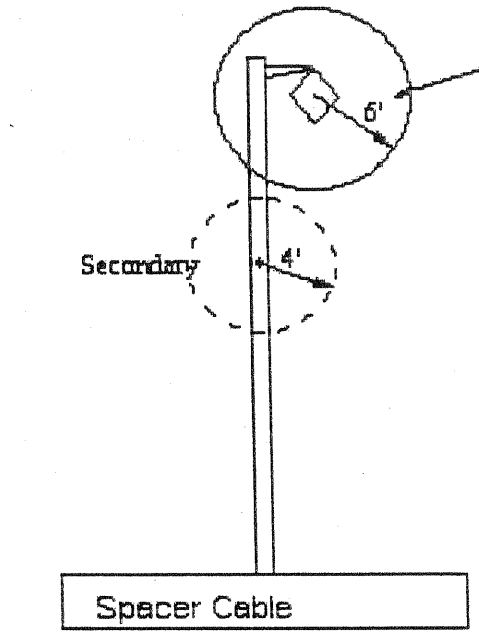
Request:

All: Does your company perform maintenance trimming of service lines to customer homes? If a customer calls requesting that its service line be trimmed, what is your response?

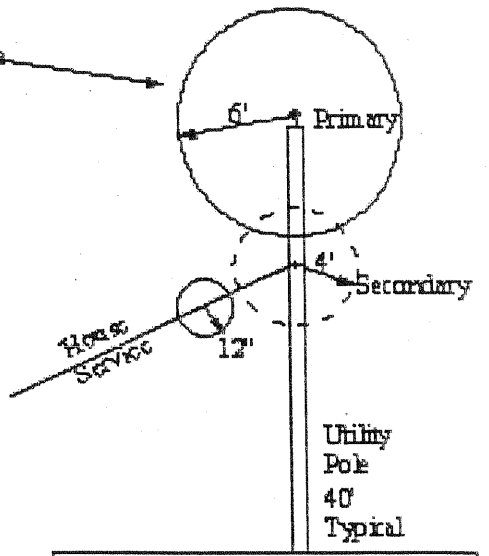
Response:

Yes, National Grid performs maintenance trimming of service lines to customers. Service lines are inspected each trim cycle and trimmed as necessary according to the trimming clearances for house services. Requests from customers not on a circuit scheduled for trimming, are followed up on with a field inspection by forestry staff. Trimming is performed as necessary if required after forestry staff inspection. If no trimming is needed, the customer is contacted at the time of forestry staff field inspection.

Vegetation Management
Distribution Line Maintenance
Minimum Requirements

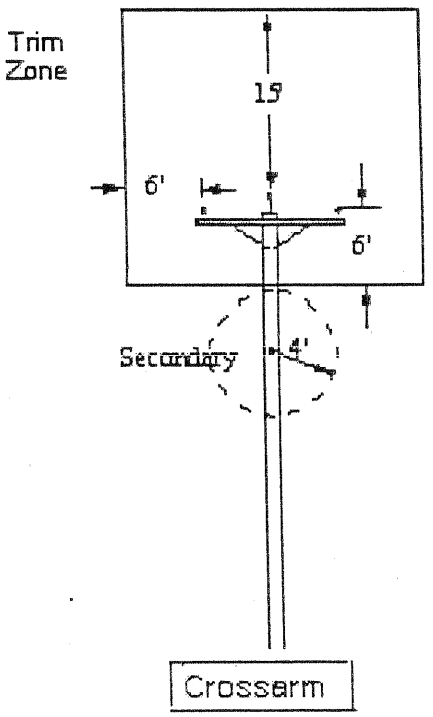


Spacer Cable



Armless and Pole Top Pin

Secondary and House Service



Crossarm

Construction Type	Trim Zone
Crossarm	Above 15' Side 6' Under 6'
Spacer Cable, Pole Top Pin, and Armless.	Above 6' Side 6' Under 6'
Secondary	Four Foot Radial Circle
House Service	12" Radial Circle